



SCHEMATIC REPRESENTATION OF THE PHAGEMID VECTOR pCES1

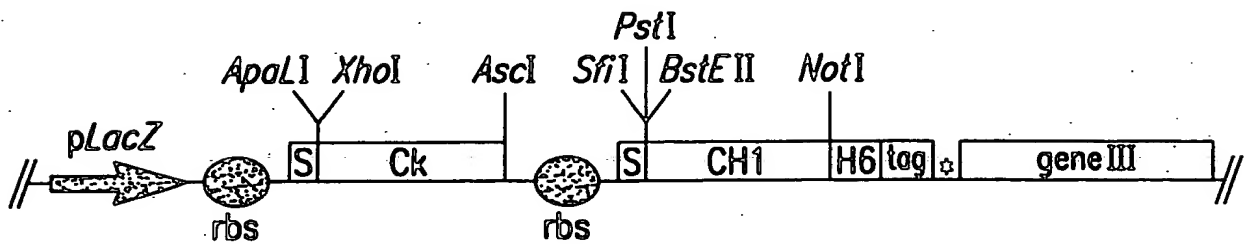


FIG. 1A



ATC AAA CGT GGA ACT GTG ... GGA GAG TGT TAA TAA GGC GCG CCA ATT CTA TTT CAA GGA GAC AGT CAT A
I K R G T V G E C * * *
ASCI rbs
Human Ck gene
Stops (SEQ ID NO: 7)

[illegible]

(SEQ ID NO: 8)

FIG. 1B

Oligonucleotide primers used for construction of the library

A. Primary amplifications

IgM heavy chain constant region

HuIgMFOR 5'-TGG AAG AGG CAC GTT CTT TTC TTT-3' (SEQ ID NO:9)

κ light chain constant region

HuCKFOR 5'-ACA CTC TCC CCT GTT GAA GCT CTT-3' (SEQ ID NO:10)

κ light chain constant region

HuCK-FOR-ASC

λ light chain constant region

HuCI2-FOR 5'-TGA ACA TTC TGT AGG GGC CAC TG-3' (SEQ ID NO:11)

HuCI7-FOR 5'-AGA GCA TTC TGC AGG GGC CAC TG-3' (SEQ ID NO:12)

λ light chain constant region

HuCI2-FOR-ASC

HuCI7-FOR-ASC

VH back

HuVH1B/7A-BACK

HuVH1B/7A-BACK-SFI

HuVH1C-BACK

HuVH1C-BACK-SFI

HuVH2B-BACK

HuVH2B-BACK-SFI

HuVH3B-BACK

HuVH3B-BACK-SFI

HuVH3C-BACK

HuVH3C-BACK-SFI

HuVH4B-BACK

HuVH4B-BACK-SFI

HuVH4C-BACK

HuVH4C-BACK-SFI

HuVH5B-BACK

HuVH5B-BACK-SFI

HuVH6A-BACK

HuVH6A-BACK-SFI

VH back

5'-CAG RTG CAG CTG GTG CAR TCT GG-3' (SEQ ID NO:13)

5'-SAG GTC CAG CTG GTR CAG TCT GG-3' (SEQ ID NO:14)

5'-CAG RTC ACC TTG AAG GAG TCT GG-3' (SEQ ID NO:15)

5'-SAG GTG CAG CTG GTG GAG TCT GG-3' (SEQ ID NO:16)

5'-GAG GTG CAG CTG GTG GAG WCY GG-3' (SEQ ID NO:17)

5'-CAG GTG CAG CTA CAG CAG TGG GG-3' (SEQ ID NO:18)

5'-CAG STG CAG CTG CAG GAG TCS GG-3' (SEQ ID NO:19)

5'-GAR GTG CAG CTG GTG CAG TCT GG-3' (SEQ ID NO:20)

5'-CAG GTA CAG CTG CAG CAG TCA GG-3' (SEQ ID NO:21)

FIG. 2i



Oligonucleotide primers used for construction of the library

VH forward

HuJH1/2-FOR
HuJH3-FOR
HuJH4/5-FOR
HuJH6-FOR

Vκ back

HuVk1B-BACK
HuVk2-BACK
HuVk3B-BACK
HuVk4B-BACK
HuVk5-BACK
HuVk6-BACK

Vκ back

5'-GAC ATC CAG WTG ACC CAG TCT CC-3' (SEQ ID NO:22)
5'-GAT GTT GTG ATG ACT CAG TCT CC-3' (SEQ ID NO:23)
5'-GAA ATT GTG WTG ACR CAG TCT CC-3' (SEQ ID NO:24)
5'-GAT ATT GTG ATG ACC CAC ACT CC-3' (SEQ ID NO:25)
5'-GAA ACG ACA CTC ACG CAG TCT CC-3' (SEQ ID NO:26)
5'-GAA ATT GTG CTG ACT CAG TCT CC-3' (SEQ ID NO:27)



5/8

Oligonucleotide primers used for construction of the library

Vλ back		Vλ back
HuVλ1A-BACK	5'-CAG TCT GTG CTG ACT CAG CCA CC-3' (SEQ ID NO:28)	HuVλ1A-BACK-APA
HuVλ1B-BACK	5'-CAG TCT GTG YTG ACG CAG CCG CC-3' (SEQ ID NO:29)	HuVλ1B-BACK-APA
HuVλ1C-BACK	5'-CAG TCT GTC GTG ACG CAG CCG CC-3' (SEQ ID NO:30)	HuVλ1C-BACK-APA
HuVλ2-BACK	5'-CAR TCT GCC CTG ACT CAG CCT-3' (SEQ ID NO:31)	HuVλ2-BACK-APA
HuVλ3A-BACK	5'-TCC TAT GWG CTG ACT CAG CCA CC-3' (SEQ ID NO:32)	HuVλ3A-BACK-APA
HuVλ3B-BACK	5'-TCT TCT GAG CTG ACT CAG GAC CC-3' (SEQ ID NO:33)	HuVλ3B-BACK-APA
HuVλ4-BACK	5'-CAC GTT ATA CTG ACT CAA CCG CC-3' (SEQ ID NO:34)	HuVλ4-BACK-APA
HuVλ5-BACK	5'-CAG GCT GTG CTG ACT CAG CCG TC-3' (SEQ ID NO:35)	HuVλ5-BACK-APA
HuVλ6-BACK	5'-AAT TTT ATG CTG ACT CAG CCC CA-3' (SEQ ID NO:36)	HuVλ6-BACK-APA
HuVλ7/8-BACK	5'-CAG RCT GTG GTG ACY CAG GAG CC-3' (SEQ ID NO:37)	HuVλ7/8-BACK-APA
HuVλ9-BACK	5'-CWG CCT GTG CTG ACT CAG CCM CC-3' (SEQ ID NO:38)	HuVλ9-BACK-APA

FIG.2iii



Oligonucleotide primers used for construction of the library

5'-ACC GCC TCC ACC GGG CGC GCC TTA TTA ACA CTC TCC CCT GTT GAA GCT CTT-3' (SEQ ID NO:39)

5'-ACC GCC TCC ACC GGG CGC GCC TTA TTA TGA ACA TTC TGT AGG GGC CAC TG-3' (SEQ ID NO:40)

5'-ACC GCC TCC ACC GGG CGC GCC TTA TTA AGA GCA TTC TGC AGG GGC CAC TG-3' (SEQ ID NO:41)

5'-GTC CTC GCA ACT GCG GCC CAG CCG GCC ATG GCC CAG RTG CAG CTG GTG CAR TCT GG-3' (SEQ ID NO:42)

5'-GTC CTC GCA ACT GCG GCC CAG CCG GCC ATG GCC CAG CTC CAG CTG GTR CAG TCT GG-3' (SEQ ID NO:43)

5'-GTC CTC GCA ACT GCG GCC CAG CCG GCC ATG GCC CAG RTC ACC TTG AAG GAG TCT GG-3' (SEQ ID NO:44)

5'-GTC CTC GCA ACT GCG GCC CAG CCG GCC ATG GCC CAG CTG GTG GAG TCT GG-3' (SEQ ID NO:45)

5'-GTC CTC GCA ACT GCG GCC CAG CCG GCC ATG GCC CAG CTG GTG GAG WCY GG-3' (SEQ ID NO:46)

5'-GTC CTC GCA ACT GCG GCC CAG CCG GCC ATG GCC CAG GTG CAG CTA CAG CAG TGG GG-3' (SEQ ID NO:47)

5'-GTC CTC GCA ACT GCG GCC CAG CCG GCC ATG GCC CAG CTG CAG CTG TCS GG-3' (SEQ ID NO:48)

5'-GTC CTC GCA ACT GCG GCC CAG CCG GCC ATG GCC GAR GTG CAG CTG GTG CAG TCT GG-3' (SEQ ID NO:49)

5'-GTC CTC GCA ACT GCG GCC CAG CCG GCC ATG GCC CAG GTA CAG CTG CAG TCA GG-3' (SEQ ID NO:50)



Oligonucleotide primers used for construction of the library

5'-TGA GGA GAC GGT GAC CAG GGT GCC-3' (SEQ ID NO:51)

5'-TGA AGA GAC GGT GAC CAT TGT CCC-3' (SEQ ID NO:52)

5'-TGA GGA GAC GGT GAC CAG GGT TCC-3' (SEQ ID NO:53)

5'-TGA GGA GAC GGT GAC CGT GGT CCC-3' (SEQ ID NO:54)

5'-ACC GCC TCC ACC AGT GCA CTT GAC ATC CAG WTG ACC CAG TCT CC-3' (SEQ ID NO:55)

5'-ACC GCC TCC ACC AGT GCA CTT GAT GTG ATG ACT CAG TCT CC-3' (SEQ ID NO:56)

5'-ACC GCC TCC ACC AGT GCA CTT GAA ATT GTG WTG ACR CAG TCT CC-3' (SEQ ID NO:57)

5'-ACC GCC TCC ACC AGT GCA CTT GAT ATT GTG ATG ACC CAC ACT CC-3' (SEQ ID NO:58)

5'-ACC GCC TCC ACC AGT GCA CTT GAA ACG ACA CTC ACG CAG TCT CC-3' (SEQ ID NO:59)

5'-ACC GCC TCC ACC AGT GCA CTT GAA ATT GTG CTG ACT CAG TCT CC-3' (SEQ ID NO:60)

FIG.2v



8/8

Oligonucleotide primers used for construction of the library

5'-ACC GCC TCC ACC AGT GCA CAG TCT GTG CTG ACT CAG CCA CC-3' (SEQ ID NO:61)
5'-ACC GCC TCC ACC AGT GCA CAG TCT GTG YTG ACG CAG CCG CC-3' (SEQ ID NO:62)
5'-ACC GCC TCC ACC AGT GCA CAG TCT GTC GTG ACG CAG CCG CC-3' (SEQ ID NO:63)
5'-ACC GCC TCC ACC AGT GCA CAR TCT GCC CTG ACT CAG CCT-3' (SEQ ID NO:64)
5'-ACC GCC TCC ACC AGT GCA CTT TCC TAT GWG CTG ACT CAG CCA CC-3' (SEQ ID NO:65)
5'-ACC GCC TCC ACC AGT GCA CTT TCT TCT GAG CTG ACT CAG GAC CC-3' (SEQ ID NO:66)
5'-ACC GCC TCC ACC AGT GCA CAC GTT ATA CTG ACT CAA CCG CC-3' (SEQ ID NO:67)
5'-ACC GCC TCC ACC AGT GCA CAG GCT GTG CTG ACT CAG CCG TC-3' (SEQ ID NO:68)
5'-ACC GCC TCC ACC AGT GCA CTT AAT TTT ATG CTG ACT CAG CCC CA-3' (SEQ ID NO:69)
5'-ACC GCC TCC ACC AGT GCA CAG RCT GTG GTG ACY CAG GAG CC-3' (SEQ ID NO:70)
5'-ACC GCC TCC ACC AGT GCA CWG CCT GTG CTG ACT CAG CCM CC-3' (SEQ ID NO:71)

FIG. 2vi